



3Q24

Quarterly Management Report  
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## Operating Results Review:

## CONTACT

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## Topics in This Report:

- Revenue Analysis
- Profit & Expense Analysis
- Financial Condition Review
- Cash Flow
- CapEx
- Recap of Recent Important Events & Announcements

**Summary:***(Amounts are on consolidated basis and are in NT\$ billions unless otherwise noted)*

	<u>3Q24</u>	<u>2Q24</u>	<u>3Q23</u>	<u>QoQ</u>	<u>YoY</u>
EPS (NT\$ per common share)	12.54	9.56	8.14	31.2%	54.2%
(US\$ per ADR unit)	1.94	1.48	1.29		
Net Revenue (US\$ billions)	23.50	20.82	17.28	12.9%	36.0%
Net Revenue	759.69	673.51	546.73	12.8%	39.0%
Gross Profit	439.35	358.13	296.64	22.7%	48.1%
<i>Gross Margin</i>	<i>57.8%</i>	<i>53.2%</i>	<i>54.3%</i>		
Operating Expenses	(79.08)	(70.30)	(68.70)	12.5%	15.1%
Other Operating Income and Expenses	0.50	(1.27)	0.13		
Operating Income	360.77	286.56	228.07	25.9%	58.2%
<i>Operating Margin</i>	<i>47.5%</i>	<i>42.5%</i>	<i>41.7%</i>		
Non-Operating Items	23.42	19.75	13.87		
Net Income Attributable to Shareholders of the Parent Company	325.26	247.85	211.00	31.2%	54.2%
<i>Net Profit Margin</i>	<i>42.8%</i>	<i>36.8%</i>	<i>38.6%</i>		
Wafer Shipment (kpcs 12 inch-equiv.)	3,338	3,125	2,902	6.8%	15.0%
Average Exchange Rate--USD/NTD	32.32	32.35	31.64	-0.1%	2.1%

*Note: Diluted weighted average outstanding shares were 25,928mn units in 3Q24***Financial Highlights:****Third Quarter 2024**

- Net revenue was NT\$759.69 billion, representing a 12.8% increase from NT\$673.51 billion in 2Q24 and a 39.0% increase from NT\$546.73 billion in 3Q23.
- Gross margin was 57.8%, 4.6 percentage points higher than 2Q24 and 3.5 percentage points higher than 3Q23.
- Operating margin was 47.5%, up 5.0 percentage points from 2Q24 and up 5.8 percentage points from 3Q23.
- Non-operating items were a gain of NT\$23.42 billion, compared to a gain of NT\$19.75 billion in 2Q24 and a gain of NT\$13.87 billion in 3Q23.
- Net income attributable to shareholders of the parent company was NT\$325.26 billion, up 31.2% from 2Q24 and up 54.2% from 3Q23. Net profit margin was 42.8% and diluted EPS was NT\$12.54.

## I. Revenue Analysis

Wafer Revenue by Technology	3Q24	2Q24	3Q23
3nm	20%	15%	6%
5nm	32%	35%	37%
7nm	17%	17%	16%
16nm	8%	9%	9%
20nm	0%	0%	1%
28nm	7%	8%	10%
40/45nm	4%	5%	6%
65nm	4%	3%	6%
90nm	1%	1%	1%
0.11/0.13um	2%	2%	3%
0.15/0.18um	4%	4%	4%
0.25um and above	1%	1%	1%

Net Revenue by Platform	3Q24	2Q24	3Q23
High Performance Computing	51%	52%	42%
Smartphone	34%	33%	39%
Internet of Things	7%	6%	9%
Automotive	5%	5%	5%
Digital Consumer Electronics	1%	2%	2%
Others	2%	2%	3%

Net Revenue by Geography	3Q24	2Q24	3Q23
North America	71%	65%	69%
China	11%	16%	12%
Asia Pacific	10%	9%	8%
Japan	5%	6%	6%
EMEA	3%	4%	5%

### Revenue Analysis:

In the third quarter, revenue increased 12.8% quarter-over-quarter, as our business was supported by strong smartphone and AI-related demand for our industry-leading 3nm and 5nm technologies.

By technology, 3nm process technology contributed 20% of total wafer revenue in 3Q24 while 5nm and 7nm accounted for 32% and 17% respectively. Advanced technologies (7nm and below) accounted for 69% of total wafer revenue.

By platform, HPC and Smartphone represented 51% and 34% of net revenue respectively, while IoT, Automotive, DCE, and Others each represented 7%, 5%, 1%, and 2%.

Sequentially, revenue from HPC, Smartphone, IoT, Automotive, and Others increased 11%, 16%, 35%, 6%, and 8% respectively, while DCE decreased 19%.

From a geographic perspective, revenue from customers based in North America accounted for 71% of total net revenue in 3Q24 while revenue from China, Asia Pacific, Japan, and EMEA (Europe, Middle East, and Africa) accounted for 11%, 10%, 5%, and 3% of total net revenue respectively.

## II. Profit & Expense Analysis

II - 1. Gross Profit Analysis			
(In NT\$ billions)	3Q24	2Q24	3Q23
Net Revenue	759.69	673.51	546.73
Cost of Revenue	(320.34)	(315.38)	(250.09)
Gross Profit	439.35	358.13	296.64
Gross Margin	57.8%	53.2%	54.3%

### Gross Profit Analysis:

Gross margin was 57.8% in 3Q24, 4.6 percentage points higher than 2Q24, primarily due to a higher capacity utilization rate and cost improvement efforts.

## II - 2. Operating Income Analysis

(In NT\$ billions)	<u>3Q24</u>	<u>2Q24</u>	<u>3Q23</u>
<b>Total Operating Expenses</b>	<b>(79.08)</b>	<b>(70.30)</b>	<b>(68.70)</b>
Research & Development	(52.78)	(48.06)	(51.13)
SG&A	(26.30)	(22.24)	(17.57)
<b>Other Operating Income and Expenses</b>	<b>0.50</b>	<b>(1.27)</b>	<b>0.13</b>
<b>Operating Income</b>	<b>360.77</b>	<b>286.56</b>	<b>228.07</b>
<b>Operating Margin</b>	<b>47.5%</b>	<b>42.5%</b>	<b>41.7%</b>
<b>Total Operating Expenses as % of Net Revenue</b>	<b>10.4%</b>	<b>10.5%</b>	<b>12.6%</b>

### **Operating Income Analysis:**

Total operating expenses increased NT\$8.78 billion to NT\$79.08 billion in 3Q24, accounting for 10.4% of net revenue. Given a higher gross margin, operating margin improved 5.0 percentage points sequentially to 47.5% in 3Q24.

## II - 3. Non-Operating Items

(In NT\$ billions)	<u>3Q24</u>	<u>2Q24</u>	<u>3Q23</u>
<b>L-T Investments</b>	<b>1.56</b>	<b>1.15</b>	<b>1.17</b>
<b>Net Interest Income (Expenses)</b>	<b>19.97</b>	<b>18.34</b>	<b>12.48</b>
<b>Other Gains and Losses</b>	<b>1.89</b>	<b>0.26</b>	<b>0.22</b>
<b>Total Non-Operating Items</b>	<b>23.42</b>	<b>19.75</b>	<b>13.87</b>

### **Non-Operating Items:**

Total non-operating items were a gain of NT\$23.42 billion in 3Q24, compared to a gain of NT\$19.75 billion in 2Q24.

## II - 4. Net Profit and EPS

(In NT\$ billions)	<u>3Q24</u>	<u>2Q24</u>	<u>3Q23</u>
<b>Income before Tax</b>	<b>384.19</b>	<b>306.31</b>	<b>241.94</b>
<b>Income Tax Expenses</b>	<b>(59.11)</b>	<b>(58.65)</b>	<b>(31.14)</b>
<b>Effective Tax Rate</b>	<b>15.4%</b>	<b>19.2%</b>	<b>12.9%</b>
<b>Net Income Attributable to the Parent Company</b>	<b>325.26</b>	<b>247.85</b>	<b>211.00</b>
<b>Net Profit Margin</b>	<b>42.8%</b>	<b>36.8%</b>	<b>38.6%</b>
<b>EPS (NT\$ per common share)</b>	<b>12.54</b>	<b>9.56</b>	<b>8.14</b>

### **Net Profit and EPS:**

Net income attributable to shareholders of the parent company was NT\$325.26 billion in 3Q24, up 31.2% from 2Q24 and up 54.2% from 3Q23.

### III. Financial Condition Review

<b>III - 1. Liquidity Analysis</b>			
<b>(Balance Sheet Items)</b>			
(In NT\$ billions)	<u>3Q24</u>	<u>2Q24</u>	<u>3Q23</u>
Cash & Marketable Securities	2,167.60	2,048.64	1,551.32
Accounts Receivable	249.97	210.21	222.83
Inventories	292.88	272.49	262.09
Other Current Assets	63.46	60.32	46.24
<b>Total Current Assets</b>	<b>2,773.91</b>	<b>2,591.66</b>	<b>2,082.48</b>
Accounts Payable	195.95	200.69	284.62
Current Portion of Bonds Payable and Bank Loans	58.80	23.08	7.42
Dividends Payable	207.46	194.60	155.60
Accrued Liabilities and Others	618.19	630.55	522.40
<b>Total Current Liabilities</b>	<b>1,080.40</b>	<b>1,048.92</b>	<b>970.04</b>
Current Ratio (x)	2.6	2.5	2.1
<b>Net Working Capital</b>	<b>1,693.51</b>	<b>1,542.74</b>	<b>1,112.44</b>

#### **Liquidity Analysis:**

On a sequential basis, total current assets increased by NT\$182.25 billion, mainly due to the increase of NT\$118.96 billion in cash and marketable securities and NT\$39.76 billion in accounts receivable.

Total current liabilities increased by NT\$31.48 billion, mainly due to the increase of NT\$35.72 billion in current portion of bonds payable and bank loans.

Net working capital was NT\$1,693.51 billion and current ratio was 2.6x in 3Q24.

<b>III - 2. Receivable/Inventory Days</b>			
(In Number of Days)	<u>3Q24</u>	<u>2Q24</u>	<u>3Q23</u>
Days of Receivable	28	28	35
Days of Inventory	87	83	96

#### **Receivable and Inventory Days:**

Days of receivable stayed at 28 days in 3Q24.

Days of inventory increased 4 days to 87 days in 3Q24, primarily due to N3 and N5 wafer prebuild.

<b>III - 3. Debt Service</b>			
(In NT\$ billions)	<u>3Q24</u>	<u>2Q24</u>	<u>3Q23</u>
Cash & Marketable Securities	2,167.60	2,048.64	1,551.32
Interest-Bearing Debts	(994.97)	(997.42)	(971.79)
<b>Net Cash Reserves</b>	<b>1,172.63</b>	<b>1,051.22</b>	<b>579.53</b>

#### **Debt Service:**

Net cash reserves increased by NT\$121.41 billion to NT\$1,172.63 billion in 3Q24, mainly due to the increase of NT\$118.96 billion in cash and marketable securities.

## IV. Cash Flow

IV - 1. Quarterly Cash Flow Analysis			
(In NT\$ billions)	3Q24	2Q24	3Q23
Income before Tax	384.19	306.31	241.94
Depreciation & Amortization	168.23	165.17	147.28
Other Operating Sources/(Uses)	(160.43)	(93.81)	(94.57)
<b>Net Operating Sources/(Uses)</b>	<b>391.99</b>	<b>377.67</b>	<b>294.65</b>
Capital Expenditures	(207.08)	(205.68)	(226.62)
Marketable Financial Instruments	(19.78)	(18.76)	(39.66)
Other Investing Sources/(Uses)	31.35	26.83	24.04
<b>Net Investing Sources/(Uses)</b>	<b>(195.51)</b>	<b>(197.61)</b>	<b>(242.24)</b>
Cash Dividends	(90.76)	(90.76)	(71.30)
Bonds Payable	(5.25)	11.50	9.80
Other Financing Sources/(Uses)	12.37	(10.99)	23.05
<b>Net Financing Sources/(Uses)</b>	<b>(83.64)</b>	<b>(90.25)</b>	<b>(38.45)</b>
<b>Exchange Rate Changes</b>	<b>(25.19)</b>	<b>11.12</b>	<b>21.13</b>
<b>Cash Position Net Changes</b>	<b>87.65</b>	<b>100.93</b>	<b>35.09</b>
<b>Ending Cash Balance</b>	<b>1,886.78</b>	<b>1,799.13</b>	<b>1,311.81</b>

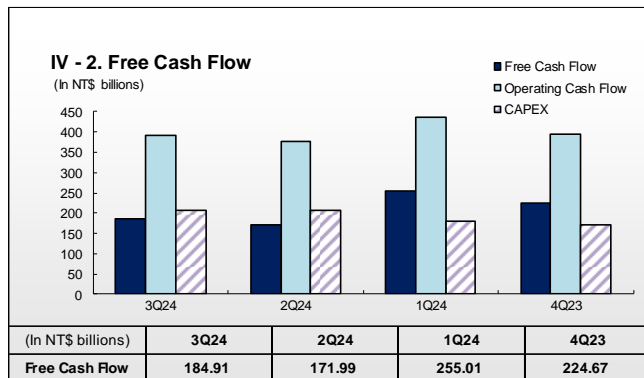
### Summary of Cash Flow:

During the third quarter, cash generated from operating activities totaled NT\$391.99 billion, including (1) NT\$384.91 billion from income before tax, (2) NT\$168.23 billion from depreciation & amortization expenses, and (3) NT\$160.43 billion for other operating uses. The other operating uses were mainly attributable to the income tax payment and changes in working capital.

Net cash used in investing activities was NT\$195.51 billion in 3Q24, primarily attributable to capital expenditures of NT\$207.08 billion.

Net cash used in financing activities was NT\$83.64 billion, mainly reflecting the payment of 4Q23 cash dividends of NT\$90.76 billion.

As a result, cash position increased by NT\$87.65 billion to NT\$1,886.78 billion at the end of 3Q24.



### Operating and Free Cash Flow:

Free cash flow increased by NT\$12.92 billion to an inflow of NT\$184.91 billion in 3Q24, mainly due to the increase in operating cash flow.

## V. CapEx

V. Capital Expenditures				
(in US\$ billions)	3Q24	2Q24	1Q24	YTD
<b>Capital Expenditures</b>	<b>6.40</b>	<b>6.36</b>	<b>5.77</b>	<b>18.53</b>

### Capital Expenditures:

Capital expenditures for TSMC on a consolidated basis totaled US\$6.40 billion in 3Q24.

## VI. Recap of Recent Important Events & Announcements

- Amkor and TSMC to Expand Partnership and Collaborate on Advanced Packaging in Arizona (2024/10/04)
- European Semiconductor Manufacturing Company Breaks Ground on Dresden Fab (2024/08/20)
- TSMC Board of Directors Approved NT\$4.00 Cash Dividend for the Second Quarter of 2024 and Set December 12 as the Ex-Dividend Date, December 18 as the Record Date and January 9, 2025 as the Distribution Date (2024/08/13)